

REMARKS

I. Present Status of Patent Application

Claims 1-19 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Kitamura (US 6,674,864).

II. Discussion of Rejections

A. Canceled claim 11

Claim 11 has been canceled without prejudice. Hence, the rejection of claim 11 is now moot.

B. Rejection of Claims 1-10 and 12-19 Under 35 U.S.C. § 102(e)

The Office Action rejects claims 1-19 under 35 U.S.C. § 102(e) as being anticipated by Kitamura (US 6,674,864). For the reasons set forth below, Applicant traverses this rejection.

1. Independent Claims 1, 3, 10, and 17

The Office Action rejects independent claims 1, 3, 10, and 17 under 35 U.S.C. § 102(e) as being unpatentable over Kitamura. Applicant respectfully traverses the rejection of independent claims 1, 3, 10, and 17.

a. Independent Claim 1

Independent claim 1, as amended, recites:

1. An apparatus for adjusting the frequency response of a speaker system, the apparatus comprising:

a user interface configured to receive user-adjustable variables indicative of main speaker low frequency characteristics; and

a compensation circuit configured to produce a desired high-pass signal from an input, the compensation circuit comprising:

a desired transfer function circuit having frequency response characteristics analogous to a desired crossover-main speaker combination;

an equivalent circuit having frequency response characteristics analogous to a main speaker; and

a deconvolution circuit configured to deconvolve the main speaker characteristics from the desired crossover-main speaker combination characteristics.

Applicant submits that claim 1 is neither anticipated nor obvious in view of Kitamura. It is well established that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Additionally, "[t]o establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." In Re Anthony J. Robertson, 98-1270 (Fed. Cir. 1999).

Applicant respectfully submits that the cited reference does not disclose each and every element of claim 1. For example, claim 1 now recites "a desired transfer function circuit," "an equivalent circuit," and "a deconvolution circuit," which are neither explicitly disclosed nor inherently present in Kitamura. Applicant, therefore, submits that claim 1 is not anticipated by Kitamura.

Additionally, Kitamura makes no mention of any specific circuit for compensating

speaker outputs. In that regard, claim 1 is also nonobvious over Kitamura.

b. Independent Claim 3

Independent claim 3, as amended, recites:

3. (Currently Amended) A crossover system for adjusting the frequency response of a speaker system, the crossover system comprising:

a user interface configured to directly receive user-adjustable variables from a user, the user-adjustable variables being indicative of main speaker low frequency characteristics; and

a compensation circuit configured to produce a desired high-pass signal from an input signal in response to the user-adjustable variables.

(Emphasis added).

Applicant respectfully submits that the cited reference does not disclose each and every element of claim 3. For example, claim 3 recites that user-adjustable variables, which are indicative of main speaker low frequency characteristics, are directly received from the user. Kitamura, however, neither explicitly disclosed nor inherently teaches that such user-adjustable variables are directly received from a user.

In Kitamura, the variables that are provided by the user are channel type data and speaker type data, such that "the adaptive speaker compensation system 10 obtains the library of filter coefficients corresponding to the speaker response characteristic data for the plurality of speakers in the audio system" Kitamura at column 4, lines 13-15. In that regard, Kitamura's "speaker response characteristic data" is not a user-adjustable variable that is indicative of main speaker low-frequency characteristics.

Furthermore, as noted above, only after receiving the "speaker response characteristic

data" from a user does Kitamura's system obtain filter coefficients. These filter coefficients are obtained from a library of filter coefficients, and not directly from a user. In that regard, Kitamura neither explicitly nor inherently teaches "a user interface configured to directly receive user-adjustable variables from a user, the user-adjustable variables being indicative of main speaker low frequency characteristics," as recited in claim 3. Applicant, therefore, submits that claim 3 is not anticipated by Kitamura.

Additionally, claim 3 is nonobvious over Kitamura. Specifically, Kitamura's "library of filter coefficients" would be rendered obsolete if a user could directly enter filter coefficients to the user interface. Since the storing of filter coefficients is crucial to all of Kitamura's claims, and since the storing of filter coefficients is emphasized in all of Kitamura's embodiments, it would be unreasonable to extend Kitamura's system to permit direct receipt of user-adjustable variables by a user.

Insofar as Kitamura neither suggests nor motivates the limitations as recited in claim 3, Applicant respectfully submits that claim 3 is allowable and requests favorable action.

c. Independent Claim 10

Independent claim 10, as amended, recites:

10. A method for adjusting the frequency response of a speaker system, the method comprising the steps of:
directly receiving user-adjustable settings from a user, the user-adjustable settings being indicative of main speaker low frequency characteristics; and
producing desired frequency response characteristics in response to the user adjustable settings.

(Emphasis added).

Applicant respectfully submits that the cited reference does not disclose each and every element of claim 10. For example, claim 10 recites that user-adjustable settings, which are indicative of main speaker low frequency characteristics, are directly received from a user. This limitation is neither explicitly or inherently taught by Kitamura. Additionally, Kitamura's system, which requires that filter coefficients be stored and provided to Kitamura's compensation system, is inconsistent with claim 10, which requires user-adjustable variables to be directly received from a user.

Applicant, therefore, submits that claim 10 is neither anticipated by nor rendered obvious by Kitamura. Hence, Applicant respectfully requests favorable action with reference to claim 10.

d. Independent Claim 17

Independent claim 17, as amended, recites:

17. A system for adjusting the frequency response of a speaker system, the system comprising:
means for receiving user adjustable settings that define low frequency characteristics of a main speaker of the speaker system, the **user-adjustable settings being directly received from a user** through a user interface;
means for receiving an input signal; and
means for producing a high-frequency signal from the input signal in response to the user adjustable setting.

(Emphasis added).

Applicant respectfully submits that the cited reference does not disclose each and every element of claim 17. As an initial matter, claim 17 is written in means-plus-function language, under 35 U.S.C. § 112, ¶ 6. In that regard, proper analysis of claim 17 requires: (1) an identification of the function(s) recited in the means-plus-function claim; and (2) an

identification, from the written description, of the structures that perform the recited function. In that regard, the means-plus-function language of claim 17 provides a claim that is not coterminous with the scope of claim 3.

The Office Action fails to properly analyze claim 17 insofar as the Office Action presumes that claims 3 and 17 are coextensive, and neither the functions nor the corresponding structures from the written description have been identified in the Office Action. Regardless, Applicant addresses the novel and nonobvious aspects of claim 17 in an effort to advance prosecution of this case.

Claim 17 requires that user-adjustable variables be directly received from a user. This limitation is neither taught nor suggested by Kitamura. In that regard, claim 17 is neither anticipated nor obvious in view of Kitamura. Applicant, therefore, requests allowance of claim 17.

2. Dependent Claims 2, 4-9, 12-16, and 18-19.

Claim 2 depends directly from allowable independent claim 1; claims 4-9 depend, either directly or indirectly, from allowable independent claim 3; claims 12-16 depend, either directly or indirectly, from allowable independent claim 10; and claims 18-19 depend, either directly or indirectly, from allowable independent claim 17. Applicant respectfully submits that, insofar as claims 2, 4-9, 12-16, and 18-19 depend from allowable independent claims, for at least this reason, claims 2, 4-9, 12-16, and 18-19 are allowable.

Additionally, Applicant respectfully submits that the Office Action fails to address each and every element recited in claims 4 and 12. In that regard, the rejection of claims 4 and 12 are

improper.

Also, it should be noted that claims 12-16 have been amended solely for the purpose of providing proper antecedent bases and clarity. In that regard, the amendments to claims 12-16 are not intended as narrowing amendments that may preclude application of the doctrine of equivalents.

Insofar as the dependent claims are allowable, Applicant respectfully requests allowance of claims 2, 4-9, 12-16, and 18-19.

III. References Made of Record

The references made of record have been considered, but are not believed to affect the patentability of the presently pending claims.

CONCLUSION

Applicant submits that all claims are now in proper condition for allowance, and respectfully requests that the Examiner pass this case to issuance. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

If there is any deficiency in this fee, or if and additional fees are required, you are hereby authorized to charge any and all such fees to Deposit Account No. 20-0778.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Sam Han', is written over a horizontal line.

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